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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,570	08/06/2001	Allen P. Hartman	3123-374	3113

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EXAMINER

KAPADIA, VARSHA A

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/923,570	Applicant(s) HARTMAN ET AL.	
	Examiner Varsha A. Kapadia	Art Unit 2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11, 13, 14, 17-25 and 27-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9, 23-25, 27, 28 and 32-41 is/are allowed.
- 6) ☒ Claim(s) 11, 13, 14, 17-19, 21, 22 and 29-31 is/are rejected.
- 7) ☐ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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This office action is responsive to the amendment filed on July 11, 2005.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11,13-14,17-19,21-22 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al (6,476,995) in view of Swearingen et al (5,668,679).

With regards to claims 11 and 29-31, Liu et al discloses a method of writing servo information onto a disk surface using a servo track writer having a digital signal processor (see figs. 2-3 and disclosure thereof; wherein CPU is considered as digital signal Processing) comprising step of positioning a transducer over the disk surface using the servo track writer in a closed-loop manner (see the paragraph bridging cols. 2 and 3; wherein Liu et al also discloses a servo writer having an actuator arm as claimed). Although Liu et al discloses the spiral writing on col.2 lines 16-19, Liu fails to further specify the capability of servo writing in the spiral tracks.

Swearingen et al. however is relied upon for servo writing in the spiral pattern. Swearingen et al also discloses reading a clock track written onto the disk surface to generate interrupt signals and providing interrupt signals to the digital signal processing (see col.3 lines 25 to 64, wherein generation of missing bits is considered as interrupt signal); and generating a spiral profile based upon a predetermined interrupt rate, wherein the profile includes a write portion, a post-write pad portion, re-trace portion and a post re-trace pad portion (see col.3 lines 58 to col.4 line 23,col.8 line25 to col.9 line 15 and col.11 lines 9-17; wherein re-trace is

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considered as function of data verification).

It would have been obvious to one of ordinary skill in the art at the time this invention was made to modify the teachings of servo writing disclosed by Liu et al with the above teaching from Swearingen et al in order to provide accurate spiral servo positioning, as taught by Swearingen et al in col.12 lines 61-63.

With regards to claims 13 and 14, Swearingen et al discloses steps of positioning transducer as claimed (see figs. 3 and 4 elements 10-13 16, 20 and disclosure thereof).

Swearingen et al is relied upon for the same reasons discussed above in this office action.

With regards to claims 17-19, see Swearingen et al on col. 8 lines 25 to col.9 lines 15. Swearingen et al is relied upon for the same reasons discussed above in this office action.

With regards to claims 21-22, see Swearingen et al on col.7 lines 1-32. Swearingen et al is relied upon for the same reasons discussed above in this office action.

Allowable Subject Matter

Claims 1-9, 23-25, 27, 28 and 32-41 are allowed.

Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-9, 23-25, 28 and 33-41 are allowable over the prior art of the record for the same reasons as indicated in the office action mailed on June 25, 2003.

Claims 20, 27 and 32 are allowable over the prior art of the record for the same reasons as indicated by the applicant's representative in the remarks filed on August 30, 2004.

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Response to Remarks

Applicant's arguments filed on July 11, 2005 have been fully considered but they are not persuasive. Applicant argued that Liu fails to mention of "positioning a transducer over the disk surface using the servo track writer in a closed-loop manner, so that the transducer follows [a] spiral profile" In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to modify the teaching of Liu et al is found in the reference to Swearingen et al as described above in this office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Varsha A. Kapadia whose telephone number is (571) 272-7557. The examiner can normally be reached on Mon Tue and Thurs. from 6:30 AM to 2:00 PM.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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